COMMERCIAL BUILDING PLAN REVIEW DIVISION



505 BARTON SPRINGS RD, 2ND FLR, Suite 250 AUSTIN, TX 78704 (512)974-6406

COMMERCIAL DETAILED PLAN REQUIREMENT INFORMATION

This checklist contains the standard information required on plans for submittal for commercial construction projects. For additional information, please see our submittal requirement information handouts or contact the Commercial Building Plan Review Division at 512-974-6406. Plan reviews expire 180 days after the date the application is filed if the application is not approve and a building permit has not been issued. If the application expires, a new submittal will be required.

Commercial Building Application

The Application must be **completely** filled out. Incomplete applications are not accepted.

Project Address

- State the actual address of the project and legal description of the property including building number and suite number if applicable
- o If an address has not been established, <u>you must first contact</u> the GIS Addressing Division located on the 10th floor (512)974-2797.

Approved Site Plan/Approved Site Development Exemption

- o Site Plan Case number and expiration date OR if submitting an Approved Determination/Exemption form, number and date approved
- State current use and proposed use as per definitions of the City of Austin's Land Development Code (for any use that changes, i.e. "Change of Use", you must first have approval through our Development Assistance Center, 1st floor, (512)974-6370).

Description of Work

Complete description of the scope of work including but not limited to:

- o New Building (Restaurant, Admn/Bus Offices, etc.)
- o New Shell Building
- o Addition
- o Interior Remodel
- o Tenant Finish-Out
- o Exterior Remodel
- Miscellaneous

Mailing Address

- Owner's name & number
- o General Contractor's name & number

Fee Information

Must be completed for ALL projects

Total dollar value of project (labor & materials) & the breakdown of that fee between applicable trades (building, electrical, mechanical, plumbing, medical gas)

Signature

o The contact person for the project. Please note that only this person will be contacted for Review Comments and miscellaneous.

Commercial Application Checklist

Required to **be completed**, signed and submitted with the Commercial Building Application.

Complete sets of plans, drawn to scale, are required for Plan Review submittal. Plan review fees are based on the Total Dollar Value of the Project and required with submittal. Please see submittal requirements for number of sets required.

Plans required for submittal include but not limited to:

Site Plan (1" = 20' - 0" or 1" = 30' scale recommended)

When a Red-Stamped city approved Site Plan is not required, then the following is required:

- Show the size and shape of the lot
- o Identify the property lines with dimensions
- o Show all buildings and structures
- o Provide the distances between the buildings/structures and to the property lines
- o Show the streets and alleys
- o Indicate the North direction
- o Show the parking space (standard and accessible)
- o Show all utilities (if applicable)
- o Provide accessibility routes including ramps as required

Floor Plan (1/4" = 1'0" or 1/8" = 1'0" scale recommended)

Sealed by an architect/State of Texas (if applicable)

- o Provide a building information block containing
 - o Occupancy
 - Type of construction
 - Square footage (of each building/tenant space)
 - o Sprinklers/Yes or No
 - o Fire alarms/Yes or No
 - o Emergency lighting/ Yes or No
 - Number of exits required
 - Exits provided
 - Number of floors in the building
 - Floor number and suite on which work is being performed
- o Show complete floor layout including equipment and process description (key floor plan).
- o Identify the use of each room
- o Show all doors and windows and state the size of each
- o Show the complete exiting system
- o Provide a wall schedule to identifying walls to be demolished, new/existing, bearing/non-bearing, and different height walls
- o Provide dimensions of rooms, corridors, doors, etc.
- State the occupancy classification of the adjoining suites
- Show accessibility information to include:
 - o the location of the accessible restroom facilities
 - o the location of elevators (if applicable)
 - o for remodels and alterations: if accessible route is not being made entirely accessible provide documentation showing cost of providing accessible route is at least 20% the cost of the alteration

Plumbing Plan (1/4" = 1'0" or 1/8" = 1'0" scale recommended)

Sealed by an engineer/State of Texas (if applicable)

The following are standard requirements for plumbing plans, additional requirements for Medical facilities, veterinarian clinics, animal shelters, schools, special chemical waste or industrial waste that would be involved with a drainage system, swimming pools are not listed. Please contact a Plumbing Review Specialist for additional requirements.

- o Provide complete floor plan showing restrooms, water closets, sinks, lavatories
- o Plumbing layout identifying all drain inlets or water outlets
- Provide drain, waste and vent riser diagram
- o Provide a water riser diagram
- o Provide a gas riser diagram
 - o State the total developed length of pipe from meter to furthest appliance
 - o State the total BTU/CFH rating of all appliances on the system
 - State the BTU/CFH rating of each appliance
 - o State the size of pipe for each section of the system
 - State the UPC table number used to size the pipe

- State the type of pipe used for the system
- Provide water fixture unit count
- o Total water fixture unit count of existing tenant spaces that are supplied from the same water meter
- Water meter size and water service line size
- Utility site plan (new construction)
- Roof storm drainage riser diagram and total square feet of area drained (roof plan and gutter system if applicable) new construction
- Wastewater tap and water meter receipts or an Approved Onsite Sewage Document from Austin Water Onsite Sewage Division.
- o All construction requiring backflow preventers shall include type, elevation detail and freeze protection if needed.

ADDITIONAL REQUIREMENTS for ALL food oriented and/or drinking establishments (for establishments where food is prepared, processed, packaged, stored, or served):

- o Provide Health Department stamped approval on 2 sets of plans with Health Department approval letter attached.
- o Provide Industrial Waste Division stamped approval on 2 sets of plans with Industrial Waste letter detailing the size and type of grease trap that has been approved.

Med Gas Plumbing Plan (1/4" = 1"-0" scale)

- Architectural Plans
- Site Utility Plan for projects that include medical gas storage in separate buildings or on site.
- o Medical gas floor plan
- o Include total number of outlets and inlets for proposed project
- o Include the total number of systems, i.e. 1 or 2 separate systems on a given system and so forth
- o Medical Gas Riser Diagrams for all medical gas and vacuum systems

Electrical Plan

All electrical sheets require a City of Austin approved Electrical Contractor's name, signature and license number AND his Master Electrician's signature and license number OR a Texas Registered Engineer's Seal (w/up-to-date signature and seal).

- o Provide lighting floor plan (1/4"=1'-0" scale, if applicable)
- o Provide power floor plan showing receptacles, switches, outlets, etc. (identify if new, existing, relocated 1/4"=1'-0" scale if applicable)
- Show the location of electric panels (new and existing)
- Show the location of each sub panel and sizes of feeders
- Provide service load calculation for new and upgraded service
- Com-Check 2009 IECC Lighting Compliance Certificate
- o Distribution riser diagram for new, upgraded and/or relocated services
 - o If the existing electric service for the proposed occupancy has been determined to be of sufficient size for the new load, a note may be on plans stating "EXISTING ELECTRIC SERVICE IS OF SUFFICIENT AMPACITY & CAPACITY FOR NEW LOAD TO BE SERVED AND IS TO REMAIN AS ORIGINALLY INSTALLED" with Master Electrician signature and license number or Engineer's seal.
- Provide a one-line drawing of the complete electrical system showing:
 - Voltage, ampacity, phases and overcurrent devices
 - Maximum available fault current
 - Conductor sizes
 - Sizes and type of wire of all grounding and bonding conductor, and grounding detail
- Exterior lighting plan including fixture types, wattage, and conductor sizes
- Nameplate rating for all motors, elevators, AC units and equipment
- Provide a panel schedule (for each sub-panel) showing:
 - o The identity of the sub-panel (panel number)
 - Size of main breaker (if applicable)
 - o AFC (available fault current), fault current calculations and panel A/C rating
 - Total load calculations
- o Identify any hazardous or classified area per the NEC.
- ESPA (Electric Service Planning Application signed by an Austin Energy Representative) required for new services.

Mechanical Plan (1/4" = 1'0" scale recommended)

Sealed by an engineer/State of Texas (if applicable)

The following are standard requirements for mechanical plans. Additional requirements for "Change of Use" permit are not listed. Please contact a Mechanical Review Specialist for additional requirements.

- Provide complete floor plan of mechanical layout (ductwork,a/c units, air-handlers, diffusers, etc)
- Manufacturer's specifications
- HVAC equipment schedules
- o HVAC equipment location.
- HVAC clearances for servicing the equipment
- o Com-Check 2009 IECC Mechanical Compliance Report
- Energy Efficiency Ratio (EER) for the cooling capacity
- o A secondary drain pan may be required for a cooling unit that is being installed in an attic or fur space
- o Materials exposed within ducts or plenums shall meet the 25/50 flame and smoke spread
- o Provide the parking garage ventilation calculation
- o The elevator machinery room with solid-state equipment requires an independent ventilation or air conditioning system
- o Verification from the structural engineer for the roof load on new or relocated HVAC equipment exceeding 300 lbs.
- o Permanent roof access location for the heating and cooling units installed on the roof
- Duct smoke detector location on air-moving system exceeding 2000 cfm. (duct smoke detectors required on the supply air side)
- o Out-side air ventilation calculations as per the 2009 City of Austin Mechanical Local Amendments.
- o A/C condensate drain discharge location (shall drain into an approved plumbing fixture or an approved disposal area)
- o Specify duct lay-out showing duct trunk line sizes, grille location, cfm of air and the insulation R-Value
- o Fire damper, smoke damper and combination fire and smoke damper locations. (Provide the damper installation details as to reflect the type of construction the damper is being installed)
- Verify rated construction within the building
- o Combustion air calculations, size of opening and the location of openings
- Air distribution device schedule
- Print out of the heating and cooling load calculations
- o Specify materials being used for the duct system
- o Refrigerant piping insulation thickness
- Electrical disconnect location, and type of disconnect. (A factory supplied switch or breaker that is an integral part of the mechanical equipment does not satisfy the requirement for a positive means of disconnect with sight of the equipment. Therefore, a disconnect and the power supply feed must be located exterior of the equipment to allow it to be easily replaceable.)
- Shutoff damper controls are required on both outdoor air supply and exhaust ducts shall be equipped with motorized dampers that will automatically shut when the systems or spaces served are not in use. (See exceptions in the 2009 IECC)
- Commissioning Form Template is required to be submitted for new buildings of 10,000 gross square feet of conditioned space or greater

Dryer vents

O Dryer vents shall extend directly to the exterior of the building and shall not exceed the required length of vent run required by the Uniform Mechanical Code or the manufacturer's installation recommendations. When the dryers are installed in accordance with the manufacturer's installation recommendations, the dryers shall be installed prior to the final mechanical inspection. When you cannot comply with either one, as an alternate, the engineer can design the system as per an approved recognized standard.

Environmental Air Duct

 Environmental air duct is ducting used for conveying air at temperatures not exceeding 250 degrees F. to or from occupied areas of any occupancy through other than heating or air conditioning systems, such as ventilation for human usage, domestic kitchen range exhaust, bathroom exhaust ducts and domestic-type clothes dryer exhaust ducts. (Bathrooms, laundry rooms and similar rooms shall have some means of ventilation to the exterior of the building)

Product Conveying air ducts

Product conveying air ducts shall be designed in accordance with the Mechanical and the Fire Code. (Such as ducting used for conveying solid particulate, such as refuse, dust, fumes and smoke; liquid particulate matter, such as spray residue, mists and fogs; vapors such as vapors from flammable or corrosive liquids; noxious and toxic gases; and air at temperatures exceeding 250 degrees F.)

NOTE:

Exhaust ducts shall extend to the exterior of the building. (Not underneath a roof or within a porch or breezeway and shall maintain the required clearances for the property lines, opening into the buildings and the finish grade.)

Additional requirements for Restaurants, Cocktail lounges, food storage and food warehouses, and any establishment where food and/or beverages are prepared, processed, packaged, stored and/or served:

- o Kitchen equipment schedule
- o Kitchen equipment lay-out
- o Type of fire extinguishing system
- o Ventilation calculations
- o Cooking and ventilation equipment manufacturer's specification
- o Exhaust outlet discharge shall maintain a minimum of 10 feet from openings into the building, 10 feet from property line, 10 feet from finish grade and 10 feet from fresh air intakes
- o Front and side view elevation for commercial hoods
- o Hood clearances from combustible and non-combustible materials (Combustibles 18 inches; non-combustible 3 inches)
- o Distance from the top of the cooking surface to the bottom of the hood (4 feet minimum)
- o Hood over-hang from the open sides of the hood (minimum 6 inches)
- o Hood less then 12 inches from the walls or ceilings shall be flashed.
- o General hood information:
 - Type 1 Hood for the removal of grease, smoke and heat
 - Type 2 Hood for the removal of steam and heat
 - Char-broiler:
 - Charcoal solid fuel char-broiler requires a separate ventilation system
 - Compensating hoods are not allowed above char-broilers
 - o Short-circuit hoods are not allowed unless listed and approved by an approved testing agency
 - Listed Type 1 Hood may be approved provided all documentation from the manufacturer is received during review process and installed according with its listing.
 - <u>NOTE:</u> Convection ovens, pizza ovens, steam kettles, commercial dishwashers and any other equipment which produces heat, vapor, and/or steam require a Type 2 Hood.
- o Provide a detailed drawing showing:
 - Materials used for the duct system, duct size and duct gauge
 - Materials used for the duct enclosure and required clearances from the duct to the enclosure (minimum 3 inches and a maximum of 12 inches)

Structural Plans (1/4" = 1'0" or 1/8" = 1'0"scale recommended)

Sealed by an engineer/State of Texas

- Foundation plan
- Roof framing plan
- Floor framing plan
- o Cross-section views
- Wall framing
- o Connection details
- o Calculations (sealed)
- Covered walkways
- o Canopies

Detail Drawings (1/2" = 1'0" scale recommended)

- Cross-sectional views
- Wall details (top and bottom connection details with approved listed anchors)
- o Material list for floors and walls, etc.
- o Door schedule
- o Hardware schedule
- Window schedule

Fire Code Plan

- o If hazardous materials will be on site, provide a chemical inventory with quantities (e.g. fuel for diesel generators, UPS batteries, etc.)
- Where diesel generators will be used, show the location of the fuel storage tank; provide manufacturer datasheets on the generator the diesel fuel storage tank. Indicate size of tank, tank UL listing number, location of normal and emergency vent, and type of overfill device. Also, indicate how the tank will be filled.
- o Indicate battery back-up power supply for exit signs, and show the location of the exit signs on the plans
- Show locations of emergency lights on the plans
- Provide a wet-chemical type fire suppression system for Type 1 commercial cooking ventilation hoods.

- o Provide either a red-stamped site development plan or a signed site plan exemption form
- o Information provided on the commercial building application must match the plans
- o For manufacturing occupancies, provide a description of the work being performed
- If no welding or open flame work will be performed in vehicle repair garages, a letter indicating this must be provided with the building permit drawing set
- Indicate if medical gases are to be used, and what type/quantities

A Knox key enclosure box must be provided by the main entrance if the fire alarm system or fire sprinkler system will be monitored offsite.

- Where a fire alarm system is provided, show the location of the fire alarm control panel on the electrical drawings
- o If a fire sprinkler system or fire alarm system are going to be provided, provide a general note indicating that these systems will be installed according to the applicable NFPA standards
- Where high piled storage will be used, indicate what will be stored, quantities, and the maximum ceiling height for the building
- Where fire sprinkler systems are to be provided for residential occupancies, indicate if a commercial NFPA 13 sprinkler system or a residential NFPA 13R sprinkler system will be installed
- o Indicate proposed locations for portable fire extinguishers on the plans

Building Design Calculation Worksheet

The Worksheet <u>must be completed</u> for the following types of projects that are required to comply with Subchapter E: Disgn Standards and Mixed Use Ordinance, and is not required on all applications: commercial development of 10,000 square feet or more, commercial development of less than 10,000 square feet that contains any exterior trademarked design feature, any building currently zoned for industrial or warehouse use being converted to commercial, and/or VMU buildings with external trademarked design features (excluding signs).

Green Building Program

Additional requirements for all developments zoned CBD and DMU (that require a site plan), zoned UNO, certified by SMART housing, or other circumstances where a Green Building Program Rating is required.

- REQUIRED: GBP Conditional Approval letter signed & sealed by Project Architect and attached to each set of Plans with Building Plan application.
- REQUIRED: Information block including GBP Rating measures the development is proposed to achieve.